

REMARKS

The Examiner has objected to claims 1-12 because due to formalities. Amendments were made to overcome the objections to the claims based on informalities.

Claims 1-20 are pending. The Examiner has rejected claims 1-20.

Claim Rejections under 35 U.S.C. § 103

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable by Bremer (U.S. No. 6,546,090) in view of Dirschedl (U.S. No. 6,262,994).

With regard to an obviousness rejection, MPEP 2142 states that in order for a *prima facie* case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all the claim limitations. Further, MPEP 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination”, and that “although a prior art device ‘may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so’” (citing *In re Mills*, 916 F. 2d 680, 16 USPQ 2d 1430 (Fed Cir. 1990)). Moreover, MPEP 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion . . . ,” citing *Al-Site Corp. v. VSI Int’l Inc.*, 174 F. 3d 1308, 50 USPQ 2d. 1161 (Fed Cir. 1999).

Regarding independent claim 1 and its dependent claims (i.e., claims 2-6), claim 1 recites “[a] method of restricting symbol size in an ADSL system comprising: obtaining information regarding a data rate during initialization; comparing the information to a threshold; transmitting symbols using one of a multiple of 8, 4 or 2 bits per symbol if the information is above the threshold; and transmitting symbols using an integer number of bits per symbol if the information is below the threshold.”

It is respectfully submitted that the cited prior art, Bremer, does not teach the claimed invention of claim 1. More specifically, Dirschedl does not disclose a system that obtains data rate information during initialization. Instead, Dirschedl discloses a system that collects data regarding the error rate, which is different from data rate. Furthermore, in transmission systems,

error rate indicates the number of erroneous bits per number of bits transmitted, whereas data rate indicates the number of bits transmitted in a given time.

Regarding independent claim 7 and its dependent claims (i.e., claims 8-12), claim 7 recites “[a] method of restricting symbol size in an ADSL system comprising: obtaining information regarding a data rate during initialization; comparing the information to a threshold; transmitting a message to choose a symbol size that is one of a multiple of 8, 4 or 2 bits per symbol if the information is above the threshold; and transmitting a message without restriction as to the size of symbols if the information is below the threshold.”

It is respectfully submitted that the cited prior art, Bremer, does not teach the claimed invention of claim 7. More specifically, Dirschedl does not disclose a system that obtains data rate information during initialization. Instead, Dirschedl discloses a system that collects data regarding the error rate, which is different from data rate. Furthermore, in transmission systems, error rate indicates the number of erroneous bits per number of bits transmitted, whereas data rate indicates the number of bits transmitted in a given time.

Regarding independent claim 13 and its dependent claims (i.e., claims 14-20), claim 13 recites “[an] ADSL modem system comprising: a first modem having a first transmitter and a first receiver; a second modem having a second transmitter and a second receiver, the second modem estimating a maximum receive data rate of the first modem and comparing it to a threshold, the second transmitter transmitting a message to the first receiver that instructs the first transmitter to transmit data using a pre-selected number of bits per symbol based on the comparison.”

It is respectfully submitted that the cited prior art, Bremer, does not teach the claimed invention of claim 13. More specifically, Dirschedl does not disclose a system that compares data rate information to a threshold. Instead, Dirschedl discloses a system that compares error rate to a threshold, where error rate is different from data rate. Furthermore, in transmission systems, error rate indicates the number of erroneous bits per number of bits transmitted, whereas data rate indicates the number of bits transmitted in a given time. Additionally, Dirschedl talks about the system in terms of error rate, and also talks about a data rate, indicating a distinction between the two values.

By this response, claims 1 and 7 have been amended.

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Based on at least the foregoing, Applicant believes that all pending claims are in condition for allowance and respectfully requests that the application be allowed and passed to issuance. If the Examiner disagrees or has questions regarding this submission, Applicant invites the Examiner to telephone the undersigned at (312) 775-8000.

The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'C. Winslade', written over a horizontal line.

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